

Amendment to the Specification:

Please replace the paragraph on page 5, line 8-18 with the following amended paragraph:

Figure 6 shows a flow chart of the method for modeling dielectric losses. The method may be implemented in, for example, software modules stored within memory 340, or within any other computer-readable medium, for execution by a processor 310. The line resistance is calculated 100. The self-inductance of the line 12 is calculated 110. The self-capacitance is calculated 120. Each of these values may be calculated using conventional methods currently used to model the lumped circuit. These values are stored to model 130 the R, L, C portion of a two-port lumped circuit model, where the resistance and inductance ~~capacitance~~ are connected in series and the capacitance in parallel, as shown in Figure 4. The frequency-dependent conductance is modeled 140 as a two-port scattering matrix connected in parallel with the self-capacitance. The model 350 can be stored in memory 340 and displayed on the display device 330.